

REMARKS

In the Office Action dated June 21, 2005, claims 30-35, in the above-identified U.S. patent application were rejected. Reconsideration of the rejections is respectfully requested in view of the above amendments and the following remarks. Claims 30-39 remain in this application, claims 36-39 have been withdrawn, and new claim 40 has been added to the application. New claim 40 is supported by example 2 in the present application.

In response to the Notice to Comply, a substitute sequence listing in paper and computer readable form is attached to this paper. No new matter is introduced by means of this amendment.

Claims 30-35 were rejected under 35 USC §103(a) as unpatentable over Dano in view of Luther, Heiss and Terstappen. Applicants respectfully point out that the claimed method for the diagnosis of tumors is based on contacting a sample with an antibody or an antibody fragment thereof which binds to the epitope 52-60 of the human uPAR on both normal and tumor cells. Binding of the antibody or antigen binding fragment thereof with tumor cells in the sample indicates a tumor and gives a prognosis for the course of a malignant disease. Antibodies according to the present invention (e.g. IIIF10) have the ability to recognize tumor uPAR as well as uPAR on normal cells. In contrast to this, other antibodies (i.e. antibodies which bind other epitopes) only recognized uPAR on normal cells. Therefore, using the conventional measurement of uPAR based on antibodies which bind to epitopes other than epitope 52-60, only binding to

normal uPAR would be detected not tumor uPAR. Surprisingly, the present inventors have found that antibodies which bind to epitope 52-60 (e.g. IIIF10) recognize both normal uPAR and tumor uPAR. Example 2 in the present application discusses the detection of uPAR antigen contents. In example 2, a differentiation between tumor uPAR and normal uPAR results from the comparison of the uPAR antigen content measured using IIIF10 and the uPAR antigen content measured using a conventional antibody.

Luther et al. does not suggest or disclose that IIIF10 can be used as a means for the prognosis of a malignant disorder. In contrast thereto, the present invention for the first time discloses that a detection of uPAR by an antibody directed against the epitope 52-60 of the uPAR provides a prognostic means for the course of a malignant disease. While Luther et al. disclose several different antibodies directed against uPAR, Luther did not recognize that among these different antibodies only IIIF10 is suitable for giving a prognosis. As is shown in example 3 on page 21 of the present application, other antibodies directed against uPAR are not suitable to serve as a diagnostic means for giving a prognosis. The antibodies of Luther et al. were not generated for use as a prognostic means but their intended use was to serve as selective tools for analyzing the uPAR in tumors. In addition, applicants respectfully point out that Luther does not suggest or disclose a step comparing the binding of two different antibodies where only one of the antibodies is directed against the epitope 52-60 as in new claim 40.

Dano et al. discloses the detection of human uPAR by antibodies for the diagnosis of tumors. Dano does not suggest or disclose an antibody against epitope 52-60 of a human uPAR as in the present invention. In addition, the use of an antibody directed against uPAR as a prognostic means for the course of a malignant disease is not suggested or disclosed. Thus, Dano does not cure the above discussed deficiencies in Luther. Heiss and Terstappen do not cure the deficiencies in Luther and Dano as neither of these references suggest that tumor u-PAR and normal u-PAR can be discriminated or what epitope can be used to discriminate them. In view of the fact that Dano, Luther, Heiss and Terstappen, either individually or in combination, do not suggest that tumor u-PAR and normal u-PAR can be discriminated or what epitope can be used to discriminate them, applicants request that this rejection be withdrawn.

Claims 30-35 were rejected under 35 USC §112, second paragraph as indefinite. The term "cause" was erroneously used in the claims. The claims have been amended to clarify that the invention gives a prognosis for the **course** of a malignant disease. In view of this amendment, applicants request that this rejection be withdrawn.

Claims 30-35 were rejected under 35 USC §112, first paragraph as failing to comply with the written description requirement. The language objected to as new matter has been deleted from the claims and thus applicants request that this rejection be withdrawn.

Claims 30-35 were rejected under 35 USC §112, first paragraph as lacking enablement due to the term "cause". As discussed above, the claims

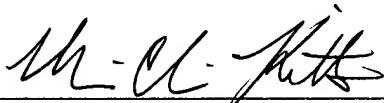
have been amended to clarify that the invention gives a prognosis for the **course** of a malignant disease. In view of this amendment applicants request that this rejection be withdrawn.

Applicants respectfully submit that claims 30-35 are now in condition for allowance. If it is believed that the application is not in condition for allowance, it is respectfully requested that the undersigned attorney be contacted at the telephone number below.

In the event this paper is not considered to be timely filed, the Applicant respectfully petitions for an appropriate extension of time. Any fee for such an extension together with any additional fees that may be due with respect to this paper, may be charged to Counsel's Deposit Account No. 02-2135.

Respectfully submitted,

By



Monica Chin Kitts
Attorney for Applicants
Registration No. 36,105
ROTHWELL, FIGG, ERNST & MANBECK, p.c.
Suite 800, 1425 K Street, N.W.
Washington, D.C. 20005
Telephone: (202)783-6040

MCK/cg